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CHAPTER 5

HEALTH PLAN AWARENESS AND SELECTION BY MEDICARE BENEFICIARIES

by

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HEALTH PLAN SELECTION AND AWARENESS

Since 1985, the elderly have been a principle marketing target for health maintenance organizations and other competitive medical plans. One stimulus for this was the Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982, implemented in 1985. This Act authorized the Health Care Financing Administration to enter risk-sharing agreements with health plans. These agreements provide health care coverage to Medicare beneficiaries for a capitated monthly payment. This Medicare payment may be supplemented with additional premiums and co-payments paid by the plan members. As of July, 1987, enrollments in risk contract HMOs totaled over 900,000 nationally (Iverson et al., 1987).[1]

Also since 1985, the Medicare program, through four demonstration sites, has been experimenting with a new form of health plan. This plan, known as a social/health maintenance organization or S/HMO, combines Medicare HMO coverage with some chronic care benefits. Both these acute and chronic care services are financed by Medicare through a single monthly capitated payment, and premiums from plan enrollees. (Chapter 4 in this report describes more fully the benefit packages and premium structures of the S/HMOs.) The notion of a comprehensive health plan -- one linking acute and chronic care under one integrated financing scheme has been widely discussed within the field of aging for several years (Leutz et al., 1985). It is a logical extension of more than a decade's experimentation with various forms of service coordination, utilization control, and integrated financing for long term care services (Hamm, Kicham, and Outler, 1985).

The S/HMOs, more than any of the predecessor LTC demonstration programs, have had to compete in the health care market place. In this effort, they have problems common to those of any health plan. They must have an audience which is sufficiently dissatisfied with its current health insurance coverage and/or health care delivery system to be interested in alternatives. They must be able to sell the merits of a prepaid, but limited provider choice delivery system. They must be able to distinguish the quality and comprehensiveness of their benefits over those of their competition. Judged solely by their first 24 months of operation, in which three of the four S/HMO programs experienced much lower enrollment rates than had been originally expected, marketing this program has been a challenging task.

What contributed to these slow enrollment? Was it the intensive competition for Medicare enrollees by HMOs, medical groups and insurance companies during this period; market saturation of prepaid plans; the inability of the S/HMOs to differentiate themselves from their competition; the inherent difficulty of any new health plan to attract enrollees; or the possibility that the S/HMO concept as represented by the demonstration sites does not have a strong market appeal?

The purpose of this paper is to assess the extent to which the S/HMOs

were able to bring their message to the public, and to identify individual characteristics associated with the awareness and non-awareness of those health plans. Other chapters in this report examine and describe the competitive market place, the actions of this competition, and marketing efforts undertaken by the S/HMOs.

LITERATURE REVIEW

The health care marketing literature abounds with decision process models regarding consumer behavior. Much of this literature is characterized by an orientation that contrasts the types of people who have enrolled in a particular plan (or coverage) with those that have not. Often the comparison is between those in prepaid HMO-type plans and those in conventional or fee-for-service coverage (Luft, 1981). Three basic perspectives have influenced most of this work: hypotheses about enrollee economic and health risk vulnerability, hypotheses about integration into the health care system and its implications for health status and change, and hypotheses about factors affecting benefit and alternative plan awareness and understanding.

Each of these hypotheses has a compelling face validity, but analyses has often produced mixed results. This has led to a evolutionary refinement and integration of measures and concepts. The "vulnerability" hypothesis formulated by Bashshur and Metzner (1970), provided an early perspective guiding this research. According to this thesis, people who perceive themselves as "vulnerable" to serious economic loss in meeting health needs, either because of their incomes or greater health care need, are said to be more likely to elect comprehensive, prepaid plans. Bice (1975) and later Berki and his associates (1977) helped refine this work, by distinguishing between expectations about the cost of services (i.e., economic risk) and expectations about the needs for service (i.e., health risk). These findings and the work of others (see, for example, Juba, Lave, and Shaddy, 1980) suggest that among employed populations, particularly families with children, economic risk is directly associated with HMO selection. Persons with lower incomes were found to be more likely to join than are those with higher incomes. Health risk is not as clearly or directly associated with plan selection. Among Medicare beneficiaries there is some confirmation of these propensities for economic risk avoidance, and for healthier people to select HMOs (Eggers, 1980; Eggers and Prihoda, 1982; Schlenger, Wadman and Coder, 1983), although the causal factors underlying these enrollment patterns are not always clear. For example, health plans have been known to present barriers to enrollees (Titus, 1982).

Factors other than risk have been employed to refine, elaborate and extend these conclusions. Perhaps the single most common finding is that people who are integrated into the health care delivery system, that is those who have good on-going relationships with their physician, are unlikely to sever these ties for moderate economic savings (Rogghmann et al., 1975; LaTour, Friedman, and Hughes, 1986). The extent to which this reflects satisfaction or inertia is not always clear. A corollary to the integration hypothesis is that persons in relatively poorer health are more likely to have a regular

source of health care than someone who is healthy. Consequently, people who are willing to change health plans and physicians are seen as likely to be in relatively better health than those who are unwilling to change (Kasper and Barrish, 1982). Under such circumstances one would expect recent HMO enrollees to be healthier than average, to have had lower medical expenses prior to enrollment, or to be more optimistic about their future health than fee-for-service recipients.

A third perspective on health plan choice is less deterministic than these preceding approaches. Instead, it looks more fully at the influence of health plan marketing on consumer awareness and decision making. Under this perspective awareness of plan benefit packages, premium costs, choice of physician and hospital facilities, and location of plan services would all be expected to affect plan choice (Friedlob and Hadley, 1985; Griffith and Wells, 1984). Although the distinction between awareness and choice may seem to be elementary, most of the preceding literature has not explicitly examined whether those who choose not to enroll in particular plans knew about the competing alternatives. As shown by Griffith and Wells (1984) the absence of a control for awareness in their analysis lowered the salience of economic and health risk vulnerability variables in their sample, compared to analyses using awareness adjustments.

Studies of consumer awareness involve both those that link awareness with the decisions made, and those that examine the elements of awareness. For example, comparisons of enrollees in prepaid group practice and other insurance programs have found that the reasons given for the choice accurately reflect differences between the programs (Friedlob and Hadley, 1985; Tessler and Mechanic, 1975; Scitovsky, McCall and Benham, 1978). On the other hand, studies of knowledge about the specific benefits covered by the health plans or insurance have found a lack of sophistication in understanding some, but not all, aspects of the health care system (Friedlob and Hadley, 1985; Marquis, 1983; Newhouse, Ware, and Donald, 1981); and a lack of information about Medicare coverage and health insurance in general (Lambert, 1980). Particularly problematic are issues such as understanding physician hospital-admission privileges, and the professional credentials that might be used to select physicians. On the other hand, consumers (including Medicare beneficiaries) were found to be much more informed and sensitive to issues relating to the cost of care, the prudence of skepticism in assessing the care and treatment they receive, the implications of restrictions on freedom of choice for physicians and hospitals, and of the limited protection available to them for long term care (Lambert, 1980; Walden, 1982).

These varying explanations of health plan choice have importance to health plans and to the Medicare population. Do HMOs and S/HMOs by virtue of their promise of lower out-of-pocket cost and comprehensive benefit packages have a tendency to attract persons whose income, health care use and cost patterns are not representative of the general elderly population? To the extent the economic risk vulnerability hypothesis holds, such plans would attract a lower income population than would fee-for-service coverage under Medicare. To the extent that the health risk vulnerability hypothesis holds,

these plans might similarly be attracting a less healthy population. Do HMOs and S/HMOs have their primary attraction to persons without strong ties to existing providers? If so, are these people healthier than their age peers?

Research on health plan choice has generally indirectly examined the information and decision processes that have led to the selection of a health plan. This is done by comparing the attributes (such as health status, income, and family size) with those in selected plans and those who are not and inferring the information and other decision processes that helped lead to the health plan choice decision. The present analysis looks at decision-making more directly — comparing awareness of competing alternatives and the benefits available with individual characteristics. This is a practical marketing issue: What information was used in the selection of several alternative health plans? Was access to this information, or its — salience influenced by an individual's economic situation, health status or other considerations?

STUDY DESIGN AND METHOD

The study results reported here are based on a telephone survey of Medicare beneficiaries. These individuals were selected to represent the four demonstration market areas and three types of health care service: S/HMOs, HMOs, and fee-for-service delivery systems. Each of these subgroups is further divided into samples of impaired and non-impaired persons. The sample design permits comparisons across and within communities of each subgroup and subsample. The survey was conducted between May 15, 1986 and January 31, 1987.

The health plan choice cases were drawn from a larger stratified probability sample of Medicare beneficiaries (n=16,658 FFS and 3,000 HMO members) and all active S/HMO members (n=approximately 8,650 as of June 1986) living in the four S/HMO demonstration communities. This larger sample was contacted in order to complete a functional health screening interview. This screening identified and classified cases into functionally impaired and non-impaired groups. This was done during the course of the telephone interviews using an algorithm programmed into a computer-assisted telephone interview (CAIT).

Persons included in the FFS and HMO samples had to meet several criteria in order to be considered eligible for the sample: age 65 or older, living within the zip code identified market area of the S/HMO, covered by both Part A and B of Medicare, not having End Stage Renal Disease, alive as of December 27, 1985, and not institutionalized. During the course of the survey, a number of sampled persons were found to be ineligible by virtue of being deceased, institutionalized, or having moved from the study area. These cases are not counted in the eligible sample size and are not calculated in the response rates. The HMO sample had one other restriction, it included persons who had joined an HMO at sometime between June 1985 and March 1986 — a period in which the S/HMOs were involved in extensive marketing activity.[2] They did not have to be active in an HMO at the time of the interview to remain

eligible for the HMO choice sample. The S/HMO sample was restricted only in the sense that it included persons who were active members of the S/HMO as of June 1986.

The health plan choice sample was drawn in advance of the health screening interview for both FFS and HMO subgroups. On a probability basis, cases were selected and pre-flagged as being in the choice interview if they were non-impaired, or impaired. A case might be flagged for either one, both, or none of these subgroups. The sample interval used for each subgroup was based on the desired number of completed interviews (200 non-impaired and 150 impaired cases per site and subgroup) and the expected completion and impairment rates. Essentially all cases identified as functionally impaired during the health screening portion of survey were selected for the choice questions. (The exception to this was Portland, where there was a large number of cases in both the FFS and S/HMO groups. To meet the sample size target there, it was necessary to select only 50% of the impaired cases.)[3] Among HMO and FFS cases the health plan choice interviews was generally conducted as part of the health status screening interview.

The S/HMO sample was selected after these beneficiaries had been health screened by the demonstration programs. They were classified into impaired and non-impaired groups by the evaluation research team, using the same criteria as had been applied to the comparison sample.[4] Because of the time lag between the date of health plan enrollment and this classification into the choice sample the health plans were asked to provide the names of anyone known by them to have changed health status and to be impaired as of June 30, 1986. The health status classifications derived from the enrollment screening questionnaires for the sample members were adjusted accordingly. The subgroups and response rates are shown for each community in Table 1. These HMO and FFS figures have been weighted to adjust the sample to the expected age and gender distribution within each subgroup. This was necessary because the comparison sample had originally oversampled persons age 75 and older. These reasons for this oversampling are explained more fully in Chapter 1. Also shown in this table are the weights used to proportionately adjust all groups for the oversample of impaired persons. The intention here is to reduce the number of impaired persons in the choice sample to the proportion that they have in their respective total population. These weighting procedures enable us to normalize each site to the proportionate distribution of age and gender cohorts, and by impairment levels, correcting for differences in the sample characteristics of each. Such corrections are necessary in descriptive analyses such as those reported here. They will not be necessary in multivariate analyses which will be conducted later.[5]

There is one other potential problem arising from the non-congruent intervals between the date plan enrollees may have entered the S/HMO and the period represented by the HMO and FFS sample frame. This involves the potential differential recall of events and factors affecting decisions to enroll in an HMO or S/HMO. People having made more recent enrollment decisions presumably may have a better recall than persons with more distant decisions. The sampling plan was designed to minimize bias resulting from

Table 1
CHOICE SAMPLE BY AREA AND HEALTH PLAN

	Brooklyn		Long Beach			Minneapolis			Portland		
	SHMO	FFS	SHMO	HMO	FFS	SHMO	HMO	FFS	SHMO	HMO	FFS
Unimpaired	202	178	203	214	200	213	237	201	201	254	201
Impaired	102	323	107	105	292	96	78	279	179	83	240
Total											
Complete	304	501	310	319	492	309	315	480	380	337	441
<hr/>											
Impairment Weight	.334	.131	.457	.332	.097	.413	.319	.143	.282	.325	.142
Weight Adjusted											
Total Complete	236	220	252	249	228	253	262	241	251	281	235
Non-Respondents	52	34	100	27	52	73	11	26	71	20	39

Case counts have been adjusted to correct for the age and gender stratification in the sample frame.

this, but it should be recognized that the number of impaired S/HMO enrollees was so small in three of the four demonstration sites that virtually all cases were needed in the choice sample. Consequently we were not able to stratify on dates of enrollment across samples. On the otherhand the vast majority of plan enrollments in three sites occurred during our HMO sample criterion period. Memory recall bias, if any results, most likely occurs in Portland where S/HMO enrollment clustered early in our HMO sample selection criterion period, rather than being distributed across the full period. The expected direction of bias would be to over report alternative health plan awareness, and perhaps to under report multiple influences on enrollment decisions. As shown later such biases are not strikingly apparent, comparing S/HMOs one against the others.

A significance of differences between proportions test (Arkin & Colton, 1965) has been used in all tables to separately compare the statistical significance between S/HMO, HMO, and FFS groups.

AWARENESS OF HEALTH PLAN ALTERNATIVES

The decision to join a health plan or to select a health insurance product can be affected by many considerations. Among these are familiarity with the alternatives available, and some understanding of the coverage and health care delivery system features, and price.

Awareness of Plan

Table 2 compares the percentage of beneficiaries in each demonstration community who are aware of the Medicare risk-contract health plans in their community. The percentages shown reflect the awareness among three subgroups: persons enrolled in the S/HMOs, persons who had made a decision to enroll in HMOs during the preceding year, and persons receiving fee for service health care at the time of the interview.

Three patterns are apparent in this table. First, awareness of the various health plans is equally high among S/HMO members, recent HMO enrollees and FFS recipients, except in Portland where unique circumstances affected S/HMO member perceptivity.[6] In general, 70% or more of each group was able to identify the largest health plan in their communities. (This rate of recognition was especially high in the very competitive Minneapolis market area.) More than 40% of each group identified half or more of all the other plans too.[5] Awareness of the S/HMO is also reasonably high, ranging from 45% to 65% among recent HMO enrollees. FFS beneficiary knowledge of the S/HMOs is just slightly lower. Although these recognition rates trail the market leader HMO, they are comparable to the recognition rates of the other health plans in the market area, including in one instance the S/HMOs parent HMO. Eighty-five percent or more of the sample was aware of at least one HMO in their community.

Portland and Minneapolis provide an interesting paradox. The S/HMO in Portland (Medicare Plus II) was the least widely known of the S/HMOs, yet this

Table 2

REPORTED RISK CONTRACT HMO AND S/HMO AWARENESS
AMONG S/HMO, HMO AND FFS BENEFICIARIES

	Long Beach			Minneapolis			Portland		
	S/HMO (n=252)	HMO (n=247)	FFS (n=228)	S/HMO (n=252)	HMO (n=262)	FFS (n=239)	S/HMO (n=252)	HMO (n=281)	FFS (n=232)
% Aware									
Market Leader HMO (By Plan Name)	75.8	71.8	74.6	90.4	88.6	87.2	42.0[c]	89.1[b]	75.2[a]
S/HMO	NA	46.6	43.2	NA	64.9	70.0	NA	54.6	38.4
S/HMO Parent HMO	NA	NA	NA	NA	54.7	50.5	NA	89.1	75.2
HMO Concept	NA	NA	76.2	NA	NA	78.0	NA	NA	59.1
<u>Awareness of Risk Contract HMOs; (By Plan Name)</u>									
% Aware 0%	15.8[a]	13.4	8.6	2.0	3.6	3.9	14.2[c]	3.6[b]	11.4
% Aware 15-25%	15.8	20.3	17.9	3.8	6.1	5.2	31.3[c]	12.0[b]	20.7[a]
% Aware 33-50%	22.9	22.8	26.5	20.9	26.3	21.6	29.3	30.8	23.9
% Aware 60-75%	29.7[a]	26.6	20.9	21.6[a]	23.2[b]	33.6	20.5[c]	31.3	26.7
% Aware 76% or More	15.8[a]	17.0[b]	26.0	51.7[a]	40.8[c]	35.7	4.7[c]	22.3	17.3[a]
<u>For Plans of Which Respondent is Aware % Received Information</u>									
	(n=224)	(n=225)	(n=211)	(n=228)	(n=249)	(n=237)	(n=235)	(n=286)	(n=223)
% 0%	45.1[a]	50.9[b]	31.6	8.6[a]	30.3[c]	19.9[b]	49.3[c]	23.2[b]	46.1
% 15-25%	2.9	4.1	6.1	11.0	8.9	8.2	.9	2.6	2.3
% 33-50%	28.1	19.8	22.1	26.9	21.8	23.1	21.7	22.9	16.5
% 60-75%	10.0	6.6	10.0	18.1	15.3	15.6	6.4	12.8	8.6
% 76% or More	16.0[a]	18.6[b]	30.3	35.5[a]	23.7[b]	33.1	21.6[c]	38.5[b]	26.5
% S/HMO	NA	41.6	60.8	NA	43.7	53.0	NA	64.1[b]	55.5
% HMO Market Leader	66.9[a]	54.2[c]	78.3[b]	72.7[c]	62.6[b]	77.1	50.0[c]	67.2[b]	53.7

Source: Telephone survey with probability sample of S/HMO, HMO and fee-for-service recipients. Case counts have been adjusted for age, gender and impairment level stratification in the sample. HMO members reported awareness refers to plans other than the one they are in. S/HMO respondents were not asked if they were aware of their own health plans, or if they knew about HMOs concept. HMO awareness questions were not asked in Brooklyn as there were no risk contract HMOs in operation there at the time of the survey. Forty percent of Brooklyn fee-for-service recipients reported that they knew what an HMO was.

- [a] p < .05 for difference between S/HMO and FFS proportions.
 [b] p < .05 for difference between HMO and FFS proportions.
 [c] p < .05 for difference between S/HMO and HMO proportions.

program had the most success in enrollment. The Minneapolis S/HMO (Seniors Plus), in contrast, was the most well known, yet had the lowest enrollment success. These two cases illustrate the importance of timing, market saturation, and targeted advertising. As discussed more fully in Chapter 4, Medicare Plus II began its marketing effort early in 1985, and had essentially reached its enrollment target level by that summer. Plan enrollees did not have extensive exposure to the other newly emerging HMOs prior to this time; and as suggested by their low awareness levels, they have had relatively little exposure since then. (The low awareness of the Portland market leader HMO is explained by two additional reasons. The similarity in plan name, "Medicare Plus"; and that this plan was only marketed in counties outside Portland until fall of 1985. Medicare Plus II was marketed exclusively in Portland.) Seniors Plus, on the other hand, was slow to develop its marketing and enrollment; consequently, its members joined months later and have apparently had much more exposure to other health plan advertising before selecting this S/HMO.

The third pattern seen in Table 2 involves the proportion of people reporting that they had received materials from health plans. Name recognition levels were invariably higher than the proportion who have reportedly received information. Between half to three-quarters of those aware of the market leader HMO plan, said they received information from that plan. More typically (except in Minneapolis), a third to a half said that they have not received information from the plans of which they are aware.

The S/HMOs showed varying success in how well they have distributed information about themselves. In Portland, the S/HMO performed as well as the market leader (also another Kaiser Plan) in bringing information to the public. This was not true in the other two sites studied. In both Long Beach and Minneapolis, the S/HMO was much less successful than the market leader. As discussed below this has been a distinct disadvantage for the S/HMOs, since they relied on formal client contacts to "sell" their enrollees. Chapter 4 discusses fully the varied factors affecting the S/HMO advertising efforts.

How Learn of Plan

The issue of how one learns of a health plan has been approached by asking HMO or S/HMO members to indicate how they had learned of their health plan, and to indicate which of these means was their most important source of information. As seen from Table 3, there was a rather wide range of information sources. A typical sample member reported using two or more sources of information. Between 20 and 40% reportedly used three or more. The most frequently mentioned information sources were both unrequested and requested literature in the mail, newspaper ads, referrals from friends or relatives who were themselves plan members and health professional referrals. Radio and television advertisements, billboards, and referrals from non-plan member friends and relatives were mentioned much less often. Even less frequently mentioned were speakers and meetings; newspaper, radio, and television stories or programs; and open houses. There was notable variation in the importance of particular information sources from community to

Table 3

HOW PLAN MEMBERS LEARNED OF THEIR HMO OR S/HMO

	Brooklyn	Long Beach		Minneapolis		Portland	
	S/HMO (n=236)	S/HMO (n=252)	HMO (n=205)	S/HMO (n=252)	HMO (n=240)	S/HMO (n=251)	HMO (n=250)
<u>Friends/Relatives Referrals</u>							
% Friends/Relatives, Plan Members	27.1	26.7	34.5	20.4[c]	41.0	33.5[c]	15.8
% Friends/Relatives, Not Plan Members	11.2	13.0	9.0	8.1	12.3	6.7[c]	12.2
<u>Professional Referral</u>							
% Doctors, Nurses, Other Health Professional	3.5	18.7	16.9	10.6[c]	31.8	4.1[c]	20.0
<u>Advertisements</u>							
% Newspaper Ads	32.8	53.3[c]	29.4	18.4[c]	36.2	10.6	8.0
% Radio Commercials	1.6	1.2[c]	4.7	4.0[c]	13.8	1.9	2.7
% TV Commercials	2.0	3.9[c]	20.6	8.0[c]	24.2	6.9[c]	14.9
% Billboards	3.0	1.4	1.5	1.8[c]	6.0	.5	.0
<u>Mail/Phone/Visits</u>							
% Unrequested Mailings	47.3	23.2[c]	33.8	57.7[c]	24.5	53.4[c]	38.9
% Phone Calls or Home Visits	15.3	18.8[c]	30.6	8.8	7.1	7.2	3.5
<u>News or Programs</u>							
% Newspaper Story	8.8	5.8	6.0	4.5[c]	13.7	4.8	3.7
% Radio Programs or News	1.4	1.2	2.4	3.6	6.9	1.4	1.7
% TV Programs or News	2.8	2.3	3.5	4.5[c]	14.6	3.6	3.4
<u>Requested Material</u>							
% Speaker at Meeting	6.5	10.4[c]	4.1	5.1	7.0	8.1[c]	17.1
% Requested Literature	21.0	24.9[c]	40.0	17.5[c]	54.0	27.7	34.2
% Open House	5.5	12.5	10.0	9.0	10.0	9.0[c]	25.0
<u>Other</u>	5.4	1.0[c]	8.0	14.7	9.3	15.5	17.7

Source: Telephone interviews with probability sample of S/HMO and HMO members. Case counts are adjusted for age, gender and impairment level stratification in the sample. There was no HMO sample in Brooklyn.

[c] $p < .05$ for difference between S/HMO and HMO.

community, and among S/HMO and HMO memberships. Presumably this reflected varied extensiveness in the use of these communication modes across communities and health plans.

The distinctions between communities and health plan types are more easily seen in Table 4, which shows the "Most Important" source of information. Three particularly striking differences between S/HMOs and HMOs are apparent here. First, among the HMOs, referrals from friends and relatives (whether plan members or not) accounted for the vast majority of the sources reported as being most important in learning about the health plan. The second most frequently cited source was that of health professionals, followed closely by direct mail contacts. Advertising and other public relations efforts through the media have infrequent mention. The S/HMOs, in contrast, generally have not had the advantage of such widespread information dissemination through informal referrals. Instead, they appear to have had to rely much more on direct mail and tele-marketing, and on the dissemination of requested plan materials and advertising. The virtual absence of professional referrals, in all sites but Long Beach was an especially striking contrast to the HMOs. The apparent necessity of relatively formal marketing procedures being used to attract enrollees as opposed to informal referrals, (coupled with the faltering efforts to do this discussed in Chapter 4), very likely was a contributing factor in the slower than expected growth of the S/HMOs.

A final finding in these data was that the support of senior organizations, senior centers and elderly social advocates, and community goodwill (as reflected in media coverage) were not a strikingly visible influence as an information source. Whether this absence of influence occurred because neither the S/HMOs nor the HMOs made extensive efforts to develop and implement these sources, or because these sources were not effective relative to other approaches cannot be readily answered with the information available.[7]

BENEFICIARY DEMOGRAPHIC CHARACTERISTICS

Effective marketing recognizes that consumers are not homogeneous in their preferences. Indeed, within the health care field, a number of factors have been found which are associated with decisions to select health insurance products, health plans, medical groups and hospitals. The marketing of the S/HMO should be no exception to these general patterns. Is there a particular or unique market segment that is especially attracted to this form of integrated acute and chronic care delivery and financing? Have the S/HMOs been successful in reaching or perhaps avoiding this market segment?

While these are important questions, it should be kept in mind that the demonstration was designed and implemented as a cautious expansion of chronic care benefits. The S/HMOs were able to conduct health screening assessments of their enrollees, and to limit the proportion of impaired members. This was done to control the level of adverse selection by enrollees -- in this case less healthy individuals being more likely to choose a health plan having more comprehensive benefits. Because of this, the demonstration projects did not

Table 4

MOST IMPORTANT SOURCE OF INFORMATION
IN S/HMO OR HMO SELECTION

	Brooklyn	Long Beach		Minneapolis		Portland	
	S/HMO (n=222)	S/HMO (n=238)	HMO (n=187)	S/HMO (n=227)	HMO (n=211)	S/HMO (n=223)	HMO (n=214)
Friends or Relatives	30.0	24.3[c]	58.8	16.6[c]	70.0	26.0[c]	49.4
Professional Referral	.9	14.0	12.0	5.8[c]	12.0	1.2[c]	18.9
Mail/Phone/Visits	37.1	20.9	16.3	54.6[c]	4.1	44.5[c]	17.0
Advertisements	14.9	18.4[c]	5.5	4.9	5.7	2.3	4.9
News or Programs	3.4	2.7	.5	1.5	.6	3.1	.9
Requested Materials	11.9	18.0[c]	6.8	14.6[c]	7.7	20.6[c]	9.0
Other	1.8	1.7	0.0	1.9[c]	0.0	2.3[c]	0.0

Source: Telephone interviews with probability samples of S/HMO and HMO members. Case counts are adjusted for age, gender and impairment level stratification in the sample. There was no HMO sample in Brooklyn.

[c] $p < .05$ for difference between S/HMO and HMO proportions.

necessarily test the true risk of adverse selection should similar health plans be available without this ability to screen their enrollees. On the other hand, the S/HMOs were expected to enroll a reasonable proportion of impaired persons so that their experience in the health plan can be compared with those not enrolled. The target proportion of impaired persons was to approximate the proportion occurring in the broader community.

Characteristics of Plan Members

Table 5 summarizes several personal and demographic characteristics of the study population. Except where indicated, these figures include the total samples; not just the choice subsample. The S/HMOs have had reasonable success in matching the age and gender demographic profiles of their membership to those of HMO and FFS beneficiaries in their communities. There were a number of differences. Most of these suggest that S/HMOs were relatively more attractive to those with lower income and less education, although no single pattern held across all communities. Three sites had fewer persons living alone, fewer living with spouses, and slightly more living in group housing facilities. And in most sites, there were more FFS respondents who were currently working. The S/HMO plans were also generally similar to FFS in their proportion of minority members. HMOs, in comparison to S/HMO and FFS, have attracted a higher proportion of people age 64-74 and fewer over age 80, and similar proportions to FFS in living arrangements, education and those currently employed. In both Portland and Long Beach, HMOs have had somewhat more success in attracting Hispanic enrollees.

Health Status Characteristics

Health status can be measured from multiple perspectives. Several common approaches are reflected in Table 6 which includes self-reported measures of global health status, health condition, and functional ability. Based on these measures the S/HMOs attracted a representative cross section of members. One indicator of this was the prevalence of self-reported health problems. There were generally no consistent patterns or noteworthy differences between the FFS, HMO and S/HMO members. The exception to this generalization occurred in Brooklyn where the S/HMO had a consistent pattern of a lower prevalence of self-reported health problems than the FFS sample. Please interpret this finding and any others involving functional health status with caution. While there are several possible organizational explanations for this, there is also the possibility of biased reporting using self completion questionnaires. The next phase of the evaluation will examine service use claims data and comprehensive assessments among the impaired, offering a basis for verifying this self report information.

The area of functional disability produced the most widespread and notable difference between S/HMO and HMO groups, and some inconsistent differences with FFS groups. All groups were attracting about equal proportions of the severely impaired. The S/HMOs seemed to be attracting a higher proportion of moderately impaired members. This was indicated in the inability to perform selected activities of daily living and instrumental

Table 5

PERSONAL CHARACTERISTICS OF S/HMO, HMO, AND FFS STUDY POPULATIONS

	Brooklyn		Long Beach			Minneapolis			Portland		
	S/HMO (n=2454)	FFS (n=1563)	S/HMO (n=1786)	HMO (n=672)	FFS (n=2050)	S/HMO (n=1505)	HMO (n=684)	FFS (n=1504)	S/HMO (n=4059)	HMO (n=776)	FFS (n=4316)
% Age 65-74	62.0[a]	49.5	49.9[a]	67.2[c]	61.6[b]	65.6[a]	62.8[b]	49.5	54.9[a]	68.4[c]	58.0[b]
% Age 75-79	17.6[e]	23.3	21.8[a]	13.7[c]	18.2[b]	17.2	17.0	18.1	21.1[c]	17.3	19.6
% Age 80 or Over	20.4[a]	27.2	28.3[a]	19.1[c]	20.2	17.2[a]	20.2[b]	32.4	24.0[c]	14.3[b]	22.4
% Female	53.4[e]	61.9	60.8	57.2	58.5	59.7	64.0	62.9	62.5	61.1	61.1
% Living Alone	28.3[a]	37.2	42.6[a]	34.8[c]	33.6	30.7[a]	33.6[b]	38.2	32.9[a]	35.3	36.9
% Living w/Spouse	51.8	50.1	45.0[a]	50.0[c]	56.4[b]	59.6[a]	56.9[b]	49.7	47.9[a]	56.9[c]	52.4[b]
% in Private Home	90.7	92.4	91.9[a]	90.5[b]	94.8	90.4[a]	95.5[c]	94.8	91.8[a]	96.1[c]	94.3[b]
% in Group Facility	.9	.5	1.6[a]	1.2[c]	.4	1.9[c]	.6	1.1	2.1[a]	.9[c]	1.3
% Lived in Area < 3 Years[d]	2.4[a]	1.1	6.8[a]	6.8[b]	3.0	4.7[e]	5.3[b]	3.2	4.1[e]	4.0[b]	2.1
% White (Non-hispanic)[d]	97.2[a]	95.5	95.5[a]	79.0[c]	92.3[b]	98.0	97.8	98.8	97.0[a]	87.4[c]	95.8[b]
% Black (Non-hispanic)[d]	1.0[a]	3.1	1.3[c]	3.4[b]	2.0	1.3[a]	1.0	.6	2.3[c]	.3[b]	2.2
% Hispanic[d]	1.4	.8	2.0[a]	15.1[c]	3.1[b]	.6[a]	.5	.1	.5[a]	10.9[c]	1.7[b]
% < High School Graduate	[a]	45.6	36.7[a]	37.0[b]	29.3	27.6	29.2	30.2	45.2[a]	23.9[c]	28.0[b]
% High School and/or Some College	[a]	42.1	50.6[e]	52.6	54.8	52.1	53.4	51.0	46.1[e]	57.5[c]	53.7
% College and/or More[f]	[a]	8.8	12.7[c]	8.6[b]	14.1	20.3[a]	15.4[c]	17.5	8.8[a]	17.1[c]	16.6
% Currently Employed[d]	10.5	9.0	7.4	9.4	7.9	7.1[a]	8.8[b]	12.1	5.8[a]	9.5[c]	8.8
% Of Those with Spouse, Spouse Employed[d]	9.3	8.3	13.1	12.0	14.5	11.2[c]	14.8	13.0	10.9[a]	12.4[b]	9.3
<u>Annual Family Income</u>											
% < \$5,999	18.7[a]	21.3	15.4[a]	15.1[b]	9.1	9.9[a]	9.7[b]	14.3	17.8[a]	12.0[c]	13.6
% \$6,000-\$9,999	27.5[a]	23.6	30.0[a]	22.6[c]	13.8[b]	13.8[a]	17.5[c]	19.1	24.4[a]	14.0[c]	17.7[b]
% \$10,000-\$14,999	27.2	25.3	23.9[a]	28.8[c]	29.7	29.1[a]	27.6[b]	23.0	26.9[a]	26.9	24.6
% \$15,000-\$24,999	19.5	17.7	19.8[a]	19.7[b]	26.2	27.9[a]	26.3	23.4	22.8[a]	30.1[c]	27.6
% \$25,000 or More	7.1[a]	12.0	11.0[a]	13.9[c]	21.1[b]	19.3	18.8	20.1	8.1[a]	17.0[c]	16.5

Source: S/HMO data are from site collected assessment forms collected from all enrollees. HMO and FFS data were collected by a telephone survey. Case counts have been adjusted for age and gender stratification in the sample.

[a] p < .05 for difference between S/HMO and FFS proportions.

[b] p < .05 for difference between HMO and FFS proportions.

[c] p < .05 for difference between S/HMO and HMO proportions.

[d] Data come from the consumer choice sample only as these data were not collected by S/HMOs on their full membership.

[e] Site did not code this information from their enrollee assessment forms.

[f] Education column may total to less than 100% because of "other education" such as trade school attendance.

Table 6

HEALTH STATUS CHARACTERISTICS OF S/HMO, HMO AND FFS POPULATION

	Brooklyn		Long Beach			Minneapolis			Portland		
	S/HMO (n=2454)	FFS (n=1563)	S/HMO (n=1786)	HMO (n=672)	FFS (n=2055)	S/HMO (n=1585)	HMO (n=684)	FFS (n=1584)	S/HMO (n=4059)	HMO (n=776)	FFS (n=4316)
<u>Self-Reported Health</u>											
% Excellent	20.6	21.0	24.1[a]	35.1[c]	37.1	16.5[a]	37.1[c]	31.9[b]	23.5[a]	41.9[c]	36.0[b]
% Poor	2.4[a]	10.0	2.9[a]	5.4[c]	6.2	1.1[a]	3.1[c]	5.4[b]	1.5[a]	3.2[c]	5.0[b]
<u>Health Problems</u>											
% w/Diabetes	10.4	12.1	7.5	9.5	9.1	8.0	9.5[b]	6.7	9.5[a]	5.6[c]	7.9[b]
% High Blood Pressure	30.1[a]	37.4	36.1	37.4	35.5	38.3	41.4	37.1	41.8[a]	37.8[c]	36.5
% Heart Trouble	15.8[a]	25.6	22.3	21.7	23.7	17.6[a]	20.1	21.6	22.2	19.2	20.8
% Stroke/Other Neurological	2.1[a]	6.5	4.6[a]	6.5	6.6	4.3[a]	6.7[c]	7.2	5.2[a]	5.9	7.1
% Lungs or Breathing	6.4[a]	14.5	11.6[a]	16.6[c]	16.1	9.3[a]	11.9[b]	15.7	12.5[a]	14.5[c]	14.4
% Chronic Cough	3.3[a]	7.0	6.6[c]	9.3	7.3	4.9	6.2	6.5	4.9[a]	6.8[c]	7.5
% Circulation	12.3[a]	27.5	17.0[a]	19.0	20.6	10.9[a]	15.2[c]	17.0	14.4[a]	15.8	17.0
% Stomach/Bowel	10.3[a]	21.9	15.4[a]	19.9[c]	18.3	11.7[a]	16.4[c]	20.0[b]	16.1[a]	18.8	20.2
% Urinary	8.1[a]	15.2	12.4	11.5	12.6	9.6[a]	8.3[b]	12.4	12.4	10.9	12.1
<u>Functional Disability</u>											
% Severely Impaired[d]	2.9[a]	8.9	6.0	6.1	5.0	5.3	4.0[b]	6.7	5.3	5.4	6.1
% Moderately Impaired[e]	7.5[a]	10.3	13.4[a]	8.0[c]	7.3	10.4[c]	5.6[b]	9.9	14.8[a]	4.2[c]	8.3[b]
% Using Wheelchair	.1[a]	3.5	3.6	2.8	2.8	4.0[c]	1.9[b]	4.0	2.7	2.1	3.0
% Using Walker	1.3[a]	4.3	4.6	3.6	3.9	3.1[a]	3.1[b]	5.4	3.8	3.1	4.5
% Using Cane	7.0[a]	12.8	12.5	10.5	11.2	10.1[a]	11.2	14.1	11.2[c]	8.6[b]	12.4

Source: S/HMO data were obtained from demonstration program health assessments forms, completed at the time of enrollment into these health plans. HMO and FFS data were obtained by telephone interviews conducted with probability samples of these respective populations. Case counts are of the total sample adjusted for age and gender stratification. All conditions are self-reported, and do not reflect any subsequent classification made by the sites or the evaluation following a comprehensive assessment with the impaired cases.

[a] $p < .05$ for difference between S/HMO and FFS proportions.

[b] $p < .05$ for difference between HMO and FFS proportions.

[c] $p < .05$ for difference between S/HMO and HMO proportions.

[d] Defined as presence of one or more limitations in activities of daily living, e.g., eating, getting in or out of chairs, toileting, dressing, bathing, or being bed bound.

[e] Defined as presence of two or more limitations in instrumental activities of daily living, e.g., meal preparation, shopping, taking medications, using telephone, doing housework, or needing mobility assistance. Use of a wheelchair or walker, or proxy reported severe memory loss, or site defined impairment also classified cases into this group.

activities of daily living. Measured in less complex ways, such as with mobility indicators like the use of wheelchairs, walkers or canes, the S/HMOs showed no consistent tendency to have adversely attracted or rejected those with such limitations. The exception again is Brooklyn, where the S/HMO had about half the rate of functionally disabled and mobility-impaired, relative to the FFS group. Analysis of Elderplan enrollees from March 1985 through June 1986 revealed proportionately more impaired persons than the group enrolling between June and December 1986. Why this change occurred is not readily clear. For example according to Elderplan representatives there was no change in this plan's queuing criteria or selection process.

Service Use Patterns

Service use patterns offer another commonly used approach to quantifying differences between health plan enrollees. By themselves, such measures have a number of important limitations. They are affected by the availability of services, case mix differences in the clinical need for them; and the prevailing practice problems within a community. However, when used in combination with case based information, these data can further be helpful in clarifying trends and issues. For the present analysis, self-reported use was been obtained on a variety of social and health services. These data represent services being used at the time of the interview, or for the S/HMO sample, at the time of enrollment into their health plan. Because of the currency of the service, these data were not subject to substantial reporting error due to poor memory recall or time telescoping. (Planned evaluation reports will further extend the service use analysis incorporating Medicare claims data, and S/HMO service record, see Chapter 1.)

The service use data for the study samples and communities is summarized in Table 7. The rates of service use tended to be uniformly low for most community services. Within each community comparisons between S/HMO, HMO and FFS groups were quite consistent with the relationships found when comparing beneficiary health conditions. Long Beach, Minneapolis and Portland S/HMOs, for example, have service use rates among their enrollees that were similar in magnitude to those of the FFS groups in their respective communities. The HMO groups generally had slightly lower use rates. The most apparent exceptions occur with assisted transportation -- where S/HMOs were attracting a higher proportion of users; and in those with more than one hospital admission in the past 12 months. Here the S/HMOs were attracting slightly fewer cases. Another interesting difference occurred among those considering nursing home admission as very likely in the next three years. S/HMOs in three of four communities had more with this expectation than either the FFS or HMO groups.

The Brooklyn S/HMO, as with the preceding health status data, appeared to have enrolled proportionately fewer problematic cases than were in the FFS sector. This was reflected across virtually every service in Table 7, but was most striking in reported hospital use rates, homemaker/home health aide, and visiting nurses.

In general then, it appeared that three of the demonstrations were

Table 7

SERVICE USE PATTERNS AMONG S/HMO, HMO AND FFS POPULATION[d]

	Brooklyn		Long Beach			Minneapolis			Portland		
	S/HMO (n=2454)	FFS (n=1563)	S/HMO (n=1786)	HMO (n=672)	FFS (n=2055)	S/HMO (n=1585)	HMO (n=684)	FFS (n=1588)	S/HMO (n=4059)	HMO (n=776)	FFS (n=4316)
% Usual Source of Medical Care	69.2[a]	90.0	84.5[a]	92.0[c]	91.4	89.5[a]	97.1[c]	92.9[b]	84.7[a]	97.4[c]	92.0[b]
% Using Visiting Nurses	.1[a]	3.7	1.5[a]	.1[c]	.1	2.8[a]	1.4[b]	3.2	1.4[c]	.1[b]	1.5
% Using Therapist	[e]	1.4[a]	.1	.1	.1	.1	[e]	.1	1.0	1.3	1.1
% Using Homemaker/Home Health Aide	1.0[a]	4.5	2.7[a]	.7[c]	.1[b]	3.4	2.6	3.3	1.9	2.2	2.5
% Using Social Worker	[e]	3.1[a]	1.3[a]	[e]	[e]	1.2[c]	.1[b]	1.8	1.1[c]	.1[b]	1.1
% Using Adult Day Care	[e]	2.0[a]	[e]	[e]	[e]	1.0[c]	[e]	1.1[b]	[e]	[e]	[e]
% Using Assisted Transportation	1.7[a]	2.8	6.8[a]	3.7[c]	2.6	6.9[a]	3.7[c]	4.6	5.2[a]	2.1[c]	2.4
% Using Home Delivered Meals	.1[a]	1.3	1.7[a]	.1[c]	1.7	2.5	1.9	3.1	1.5[a]	2.2	2.4
% No Hospital Admissions in Previous 12 Months	85.8[a]	79.1	79.3	79.4	81.0	78.5[c]	83.4[b]	79.5	80.4	81.6	80.7
% More than 1 Hospital Admission in Past 12 Months	2.8[a]	6.9	5.0	5.9	6.0	4.7[a]	4.9	6.5	5.1[a]	6.9[c]	6.1
% Nursing Home Admission in Previous 12 Months	.1	[e]	2.9[a]	1.0[c]	1.4	2.3[c]	.1[b]	1.7	1.5[c]	.1[b]	1.4
% Considering Nursing Home Admission	.3	1.4	[e]	1.3[c]	.1[b]	[e]	1.4[c]	2.3[a]	[e]	[e]	[e]
% Considering Nursing Home Admission as very likely in the Next 3 Years[f]	14.9[a]	11.2	15.8[a]	8.4[c]	11.6[b]	12.6[a]	6.5[c]	9.2[b]	8.8[c]	5.7[b]	8.3

Source: S/HMO data were obtained from demonstration program health assessments forms, completed at the time of enrollment into these health plans. HMO and FFS data were obtained by telephone interviews conducted with probability samples of these respective populations. Case counts are of total sample adjusted for age and gender stratification.

- [a] $p < .05$ for difference between S/HMO and FFS proportions.
- [b] $p < .05$ for difference between HMO and FFS proportions.
- [c] $p < .05$ for difference between HMO and FFS proportions.
- [d] Information reported by S/HMO cases refers to their experiences prior to the S/HMO enrollment. HMO and FFS respondents are reporting on their situation at the time of the interview.
- [e] Less than 0.1 per cent.
- [f] Data collected from choice sample only, adjusted for impairment stratification.

successful in enrolling a representative cross section of the Medicare beneficiaries in their communities. Elderplan in Brooklyn, on the other hand, appeared to have attracted a relatively healthier population than the other S/HMOs or its FFS comparison group. Several possible methodological explanations for this have already been noted. Additionally it is possible that organizational factors may have contributed to a favorable selection. For one thing, this plan appears to have recruited a high proportion of persons who reported not having a "usual source of medical care" at the time of their enrollment. The S/HMOs generally drew between 10 and 15% of their enrollees from among beneficiaries who did not formerly have a usual source of medical care: a pattern similar to HMOs. The Brooklyn S/HMO has drawn about 30% of its enrollees from those without a usual source of care. Previous studies of HMO enrollees suggest that persons without a usual source of care tend to be healthier than those with such care. Another possible factor may have been that a disproportionate number of Elderplan disenrollees may have been impaired. This issue will be examined further in later phases of the evaluation. Elderplan, uniquely among the S/HMOs, formed its own staff medical group. Perhaps this was relatively more attractive to persons without usual sources of care than to persons with established relationships. These points about a favorable selection of possible enrollees are made, not as a criticism of Elderplan, but rather to point out the possible effect of their organizational form and unique community circumstances on voluntary enrollment into a S/HMO.

Insurance Coverage

Medicare beneficiaries typically supplement their Medicare coverage with various other insurance protection. This protection can be in the form of private policies or coverage under governmental programs. Table 8 shows the proportion of S/HMO, HMO, and FFS samples in each demonstration community having some form of private health insurance, and/or other governmental health care benefits, in addition to the health plan in which they are enrolled. By and large these policies are designed to pay for medical expenses not paid by Medicare. Few S/HMO members had any coverage beyond this S/HMO membership. HMO members, though more often having some coverage, nevertheless had less than half the proportion found among FFS members. Over 70 percent of this latter group had some kind of coverage. Often they had more than one policy.

In spite of the differences among groups in their propensity to have private insurance, there were few differences across groups in the proportion eligible for veterans benefits, other federal programs, or for Medicaid. Consequently, the explanation must be found in other areas. Two of these are investigated here: the relative cost of coverage and the benefits perceived as being obtained.

Cost of Coverage. The FFS public is paying a substantial amount in monthly premiums for insurance protection. Half of all persons with insurance had monthly premiums in excess of \$25 per month. Over 25 percent paid more than \$50 per month.

Table 8

HEALTH INSURANCE COVERAGE AMONG S/HMO, HMO AND FFS HEALTH PLAN CHOICE SAMPLE

	Brooklyn		Long Beach			Minneapolis			Portland		
	S/HMO (n=236)	FFS (n=218)	S/HMO (n=251)	HMO (n=248)	FFS (n=228)	S/HMO (n=252)	HMO (n=261)	FFS (n=240)	S/HMO (n=251)	HMO (n=279)	FFS (n=232)
% Any Public/Private Insurance	34.3[c]	68.8	25.3[a]	36.3[c]	78.3[b]	29.0[a]	33.5[b]	76.2	20.3[a]	32.5[c]	69.4[b]
% Private Insurance	18.9[c]	57.7	11.4[a]	20.6[c]	68.6[b]	7.9[a]	15.8[c]	62.2[b]	6.1[a]	18.9[c]	62.6[b]
% Of Those with Insurance, 1 Policy	59.4	61.8	52.6[c]	63.1	55.0	35.5[a]	58.1[c]	58.3	73.2[a]	68.0[b]	50.9
% Of Those with Insurance, 3 or More Policies	9.8	6.8	14.2[a]	11.2	7.8	10.1[a]	4.5[c]	5.2	0.0[a]	0.0[b]	8.8
% Eligible for Veterans or Other Federal Programs	12.5	10.0	12.7[a]	15.4	21.3	19.2	14.6	17.6	11.2	13.2	12.8
% Recipients of Medicaid	5.4	9.5	2.9	5.4	3.6	4.2	8.1	8.3	4.9	3.6	2.4
% With Assistance in Health Insurance Payments	5.3[c]	25.6	2.4[a]	16.4[c]	42.0[b]	22.6[a]	6.2[c]	40.4[b]	3.0[a]	9.8[c]	27.0[b]
% Monthly Insurance Premium (those w/ insurance only)[d]											
\$0 to \$25	12.2[c]	38.9	27.2[a]	56.1[c]	48.1	51.3	59.0[b]	46.6	45.6[a]	56.7[c]	25.9[b]
\$26 to \$50	29.6	36.9	11.3[a]	26.4[c]	17.6[b]	23.8[c]	14.6[b]	22.5	6.9[a]	20.8[c]	32.9[b]
\$51 to \$75	39.1[c]	10.2	19.4[c]	10.0	15.2	12.4	9.6[b]	16.9	22.8[c]	7.2[b]	18.3
\$76 or More	19.1	14.0	42.1[a]	7.6[c]	19.2[b]	12.4	16.7	14.0	24.7[c]	15.3[b]	22.9
% Monthly HMO Premium[d]											
\$0 to \$9		NA		82.9	NA		24.5	NA		19.0	NA
\$10 to \$19		NA		11.6	NA		73.4	NA		42.6	NA
\$20 to \$29	100.0	NA		5.4	NA	100.0	2.0	NA		26.0	NA
\$30 to \$39		NA			NA			NA		7.6	NA
\$40 to \$49		NA	100.0		NA			NA	100.0	4.8	NA
% Dental Benefite	79.1[c]	14.5	93.1[a]	20.9[c]	22.8	84.2[a]	37.4[c]	21.5[b]	15.9[c]	6.8[b]	16.8
% Drug Benefite	95.4[c]	29.6	98.0[a]	78.0[c]	57.0[b]	96.1[a]	28.3[c]	59.1[b]	95.9[a]	51.1[c]	40.7[b]
% Expanded Nursing Home and Home Care Benefit	84.7[c]	28.8	93.9[a]	58.5[c]	38.4[b]	91.9[a]	48.7[c]	36.1[b]	90.6[a]	61.9[c]	34.0[b]
% Eyeglasses	91.4[c]	16.2	93.6[a]	50.4[c]	26.9[b]	90.2[a]	48.7[c]	21.4[b]	96.4[a]	71.7[c]	18.7[b]
% Would Consider LTC Insurance	40.8	34.0	39.1	36.3	41.6	44.9	50.3	50.9	37.2[a]	44.0	46.5
% Considered 1 or More HMOs (other than their own)	NA	NA	8.6	11.9	10.3	13.1	15.6	17.1	5.5[a]	12.2[c]	13.2

Source: Telephone interviews with a probability sample of S/HMO, HMO and FFS Medicare beneficiaries. Case counts are adjusted for age, gender and impairment level stratification. S/HMO and HMO premium levels are reported by the respective health plans. These levels were assigned to the cases reporting membership in a particular plan.

- [a] p < .05 for difference between S/HMO and FFS proportions.
 [b] p < .05 for difference between HMO and FFS proportions.
 [c] p < .05 for difference between S/HMO and HMO proportions.

Individuals without outside assistance in their health care costs, appeared to be somewhat more inclined to enroll in prepaid health plans than were persons with such support. Between 25 percent and 40 percent of persons receiving FFS benefits had someone assisting them in paying some or all of their health coverage cost. This was about two to ten times the proportion of persons enrolled in S/HMOs or HMOs. About half of the individuals receiving support had all of these costs paid by one source (most often the previous employer or union), and the balance had some or all costs paid by a variety of employer or union sources. Family members or other sources appeared to be infrequent sources of such support.

Benefit Coverage

While outside assistance in insurance payments appeared to be important, the single most striking difference between the three populations studied occurred in their reported "high option" health care benefits. All groups were covered by Medicare entitled benefits (e.g. physician, hospital placement, home health care and limited skilled nursing care). Four benefits were used as indicators of access to "high option" coverage: dental services, prescription drugs, eye glasses, and expanded nursing home and home care.

Beneficiaries were asked whether their health plan or insurance covered each of these benefits. While the elderly do not always accurately understand the coverage available to them under Medicare or private insurance, it is important to recognize that their actions or behavior is often determined by their subjective impressions. As seen in Table 8, there were vast differences between S/HMO members and the FFS samples in the proportion reporting all these high option benefits. The differences between S/HMO and HMO groups were not as wide for these benefits, but the S/HMOs were consistently perceived by a larger proportion of their members as offering a full range of high option benefits. (One exception to this was the Portland S/HMO which did not offer dental coverage.)

These differences, while subject to some inaccuracy in perceptions, nevertheless reflect the expected difference between S/HMO and FFS members about their coverage. HMO members were in between these two extremes. These patterns suggested that S/HMO and HMO members perceived themselves as having availed themselves to a fuller range of benefits than is true for those in FFS, in spite of the relatively small cost differential between S/HMO and FFS insurance. The cost versus benefit tradeoff between S/HMO and HMO members, is more directly assessed in the next section. Is there a health risk, or financial risk avoidance factor affecting the selection of S/HMO over FFS health systems? This question will require extensive exploration planned for later analyses.

REASON FOR ENROLLING IN S/HMO OR HMO

The preceding analysis has described a variety of factors potentially associated with enrollment in a prepaid health plan: awareness, coverage, and cost. In this section, we compare the relative importance of these factors

using a respondent self-reported "most important" reason for health plan enrollment. Table 9 summarizes the results of this question. Benefits offered and cost of the premiums emerged as the two most important reasons. Together they accounted for 50 to 75 percent of those responding. These results were consistent with perceptions among HMO and S/HMO plan members that they were receiving more benefits and a lower than or equivalent price to those in the FFS. Beyond these factors less paperwork, reputation of staff, and continuity with one's physician shared similar levels of importance. In general, HMO members tended to emphasized continuity with physicians and less paperwork somewhat more than did S/HMO members. Greater choice of physicians was a central enrollment incentive only at the Long Beach S/HMO, where the most dominant HMO was a staff model. The Brooklyn S/HMO received a sizable proportion of its enrollees from among those needing a physician. This was consistent with the comparatively high proportion of the members who did not have a usual source of medical care at the time of enrollment.

Other factors had a much lower reported importance than might have been expected given the information sources cited earlier. Among these were the recommendations of friends, relatives, health professionals and others; and continuity with one's usual hospital, and convenience of location. It may be that these are necessary conditions in selecting a health plan, but not sufficient ones. Once these are held constant price and coverage can play a much more decisive role in selection. In situations where HMOs are equal in price and benefits (e.g., Minneapolis), these other factors may become more decisive (e.g., continuity with one's physician).

DISCUSSION AND FINDINGS

Marketing the S/HMO concept relative to HMOs and FFS is a complex undertaking. Its success is not simply affected by how well the plan creates a public awareness about itself. Other contextual factors seem to be present as well. One of these is the comparative cost of S/HMO relative to its competition — particular the FFS sector. A subtle but distinct element in this cost is the source of payment.

While HMOs and S/HMOs offer an assumed savings in out-of-pocket costs, this incentive has little affect on consumer behavior if they are not responsible for the payments. To the extent that a community is characterized by a large proportion of its retirees having financial assistance in their insurance, it can be expected that there will be a lower rate of growth in S/HMO enrollments, and fewer incentives for Medicare beneficiaries to select the S/HMOs. (An important countervailing factor to this generalization could arise, if the sources of assistance, e.g., employers or unions, were to provide incentives for their retirees to enroll in prepaid plans. This later tendency can be expected, but as discussed in Chapter 4, S/HMOs have not yet been able to negotiate many arrangements with these outside financial assistance groups, because of their demonstration status and limited market areas.)

The demonstration site communities illustrated the interaction of these

Table 9

MOST IMPORTANT REASON MEMBERS ENROLLED IN THEIR HMO OR S/HMO

<u>Recommendations</u>	<u>Brooklyn</u>	<u>Long Beach</u>		<u>Minneapolis</u>		<u>Portland</u>	
	<u>S/HMO</u> (n=230)	<u>S/HMO</u> (n=250)	<u>HMO</u> (n=198)	<u>S/HMO</u> (n=248)	<u>HMO</u> (n=239)	<u>S/HMO</u> (n=242)	<u>HMO</u> (n=244)
% From Friends/Relatives	2.6	2.2	2.9	3.3	2.9	2.2	.7
% Health Professionals		.6	.5	.2	.9		1.2
% Other Groups				.8	.4		
<u>Reputation of Staff/Care</u>	4.2	5.2	3.5	6.1	3.9	7.8	6.2
<u>Choice of MDs or Hospital</u>							
% Able to Keep Same MD	1.9	8.5	5.2	1.4[c]	20.0	2.2[c]	11.5
% Able to Keep Same Hospital	.2	.6	.7		.4		1.2
% Greater Choice of MDs	1.7	9.1[c]	.6	.2[c]	2.7	1.2	.1
% Greater Choice of Hospital		.4	.5		.4		.4
% Need a Physician	5.7	1.4	1.9	.2	.8	.1	
<u>Convenience</u>							
% Hospital Location	.2	.4[c]	3.4		.8	.8	2.1
% MD Offices Locations	3.5	.6	1.5	1.4		.4	1.8
% Short Waiting Time	3.2	.8	.2	.4	1.6	1.4	.4
% Less Paperwork	4.1	6.3	11.1	4.0[c]	8.6	4.4[c]	12.2
% General Convenience	1.4			.8		.5	
<u>Price and/or Coverage</u>							
% Lower Premiums	7.6	10.9	17.0	4.1	3.3	5.7[c]	14.5
% More Benefits	35.1	36.2[c]	5.6	64.3[c]	22.4	38.0[c]	11.2
% Price and Coverage	22.8	12.7[c]	37.4	8.8[c]	24.1	29.9	30.2
% Needed Source of Insurance	3.2	1.8	3.0	1.8	4.6	1.5	2.9
<u>Other</u>	2.8	2.4[c]	6.9	2.3	2.1	4.1	3.4

Source: Telephone interviews with probability sample of S/HMO and HMO members. Case counts are adjusted for age, gender and impairment level stratification in the sample. There was no HMO sample in Brooklyn. Column totals may not equal 100% due to rounding.

[c] $p < .05$ for difference between S/HMO and HMO proportions.

incentives and offered a basis for understanding one aspect of the market environment: the advantages and disadvantages experienced by the S/HMOs. Medicare Plus II, for example is a S/HMO located in a community (Portland) in which slightly fewer of its FFS population reported receiving outside assistance in paying for health care coverage (see Table 8). This likely gave the S/HMO cost attractiveness over a large portion of the Medicare beneficiary population. Neither SHP in Long Beach nor Seniors Plus in Minneapolis enjoyed this advantage. In both these cases, the S/HMOs had to compete against a FFS sector which had a large proportion of its retirees receiving outside public or private financial assistance. Until they were able to negotiate group enrollment arrangements, these plans operated at a disadvantage — since savings to the client was not an especially salient factor.

Elderplan, the Brooklyn S/HMO, is in an environment somewhat similar to that of Portland with a somewhat lower percent of the FFS beneficiary population receiving assistance with their health care coverage. While this could potentially give the S/HMO a cost savings attraction to the public, there was one major disadvantage, the Brooklyn population was much less familiar with prepaid delivery systems. Consequently, Elderplan may not have had the same opportunity to capitalize on its cost advantage.

The second major theme suggested by this data concerns perceptions of benefit coverage. Do differences in coverage portend a potential market niche or segment for future S/HMO enrollment growth? How rich and different must the S/HMO benefit package be relative to its competition for a S/HMO to have appeal to a broad segment of the elderly market? How rich can it be without risk of adverse selection.

In Portland, the S/HMO appeared to have a clear marketing advantage over its competition in both drug and eyeglass benefits. Neither of these benefits had any obvious association with an attraction of less healthy enrollees. The nursing home benefit by itself might be suspected of having this association. However, there was little evidence presented in the health status and service use histories of the plan members which would indicate this.

The situation in Long Beach was somewhat different. Here the S/HMO must offer a drug benefit in order to be competitive with both the HMO and FFS sectors. The S/HMO had a clear market advantage in its dental and eye glass coverage. Compared to drugs, these are perhaps more clearly luxury coverage items with perhaps more limited appeal. Nursing home coverage also more uniquely in S/HMO benefit again raises the potential for adverse selection. In short, it appears that this S/HMO can have appeal to a broad segment of the elderly market, but one which is drawn to high option benefits, not simply the chronic care uniqueness of the S/HMO.

The Minneapolis S/HMO had a marked advantage over its HMO competition in all benefits, and with its FFS competition in all but drug coverage. The Brooklyn S/HMO had no HMO competition during this period, and offered a substantially greater array of benefits than its FFS competition. Both of these health plans would appear to have the potential to appeal to a broad mix

of enrollees without an emphasis on chronic care services. It remains an empirical question, however, whether the high option benefit advantages of these S/HMOs bring a market segment which is simply more cautious about the future, or one which is truly at risk of needing this coverage.

SUMMARY FINDINGS

- o Awareness of the various health plan options available in each community is equally high among S/HMO members, recent HMO enrollees, and fee-for-service (FFS) members, except in Portland where awareness of the S/HMO plan was low but awareness of the parent HMO was high.
- o While the S/HMO in Portland was the least widely known of the S/HMOs, it had the most enrollment success apparently because the parent, Kaiser was well known, and because about half its enrollment were conversions from the parent health plan.
- o Typical sample members reported using 2 or more sources of information in making choices about membership. The most important source of information for HMO members was from friends and relatives, followed by health professionals, and by direct mail contacts. S/HMO members, in contrast, have not had the advantage of informal referral but relied more heavily on direct mail and telemarketing.
- o S/HMOs were reasonably successful in attracting members that matched the aged and gender demographic profiles of the HMO and FFS members in their communities. HMO members, in comparison to S/HMO and FFS, attracted a higher proportion of people aged 64-74 and fewer over age 80.
- o Measured in terms of self-reported health conditions, S/HMO members were essentially similar to the HMO and FFS members in their communities. With respect to self-reported functional health status. S/HMO members, generally had about the same proportion of severely impaired as FFS and HMOs samples. The S/HMOs did, however, generally have a higher proportion of moderately impaired members. HMOs typically had a lower proportion than FFS.
- o S/HMO members generally reported prior enrollment service utilization patterns which were similar to those in the FFS groups within each community.
- o All findings with respect to self-reported measures of health or service use should be considered as tentative. These results will be reanalyzed in later phases of the evaluation incorporating field verification comprehensive assessments, and service use claims data in place of the self-reported data.
- o S/HMO members generally drew between 10-15 percent of their enrollees from individuals who did not formerly have a usual source of medical care, a pattern similar to HMOs. Elderplan, with its new staff model

medical group drew about 30 percent of its enrollees from those without a usual source of care.

- o Over 70 percent of FFS members had some type of supplemental Medicare insurance policy, while only about 20 percent of HMO members and about 8 percent of the S/HMO members had such coverage.
- o The most important reason for enrolling in a health plan was the benefits offered for S/HMO members and the cost of the premiums for HMO members. Less paperwork, reputation of staff, and continuity with one's physician were also important factors for both groups.

NOTES

- [1] The communities studied in the S/HMO demonstration are atypical of these national patterns. Within these communities, HMO enrollments have been much more active, and have captured a higher proportion of the elderly population. These growth rates are described in Chapter 4.
- [2] Eligible HMO members were identified by screening age and geographically eligible Medicare beneficiaries against the Medicare Group Plan master membership records. Because of an inherent lag time in the currency of these files, it was expected that there would be shifts in the persons enrolling or disenrolling from HMOs, between the date of sample selection and the interview date. Twenty-four cases in the original FFS sample were found to have joined an HMO between March 1986 and June 30, 1986; 34 HMO sample cases disenrolled during this same period. HMO disenrollees have been retained in the HMO sample since they had elected to enroll in an HMO rather than a S/HMO during the target period. Among FFS cases the decision rule was to exclude from the longitudinal panel any FFS cases at baseline who were known to be in an HMO. This was done because of the absence of Medicare claims information on HMO members and our consequent inability to track Medical claims data on these cases. The results shown in the present analysis, exclude FFS to HMO joiners.

Anyone from the HMO or FFS sample joining a S/HMO during the interviewing period was converted to be a member of the S/HMO group. This was done because it conforms to our S/HMO case selection criteria of including all active members in June 1986.

- [3] As the telephone survey progressed, it became apparent that both field verified impairment and response rates were lower than expected. An age stratified probability sample of FFS recipients was selected to supplement the original sample in all four communities in order to enable the project to reach its targeted number of impaired cases. The same rates of preselection for the impaired choice interview were applied to the supplemental sample (i.e., 50% in Portland, 100% elsewhere). Non-impaired choice interview targets had been reached in the original sample, so further cases were not preselected for this group. See Chapter 1 in this report and Durako (1987) for a full discussion of the sample selection and field methods.
- [4] Severely impaired include persons who are bed bound and/or who are unable to perform one or more activities of daily living (ADL) without assistance (e.g., eating, getting in or out of chairs, dressing, toileting, or bathing). Moderately impaired persons include those unable to perform two or more instrumental activities of daily living (IADL) without assistance (e.g., prepare meals, laundry, light housework, shop for groceries, manage money, take medicine, make telephone calls); and/or in addition to two or more IADL limitations, have limitation in mobility (e.g., must stay in the house all or most of the time, or need the help of another person in getting around inside or outside the house). Problems with severe memory

loss (reported by a proxy), the use of a wheelchair or walker, and for S/HMO members, if the health plan had defined the cases as impaired on a basis other than the health assessment form were additional criteria defining moderate impairment. All persons not identified as impaired were considered as unimpaired.

- [5] The mode of data collection for health status assessments varied between the comparison group (telephone interviews) and the S/HMO group (self-completed mail questionnaire). Any possible bias in health status reporting has been guarded against using two procedures. First, the S/HMO sites employed a number of screening criteria to review and verify the information reported on the questionnaires (see Chapter 6 for a discussion of this process). We included only the case manager corrected HSFs. The telephone interview results were similarly screened by the evaluation — field staff before comprehensive assessments were conducted. Later analyses will compare field verified in-home comprehensive assessment results with self-completion and telephone interview results.
- [6] Name recognition of a health plan is not necessarily synonymous with knowing that a plan is an HMOs. This is illustrated by the difference in the proportion of respondents, who indicated that they were familiar with the HMO concept; compared with the proportion claiming to be aware of a plan. Active HMO market areas, not surprisingly, appeared to have a higher proportion of the public who were familiar with the HMO approach to health care. Brooklyn, the fourth demonstration site, did not have any risk contract HMOs, but 38.4% of the fee-for-service recipients said they knew what an HMO was.
- [7] The relatively limited influence of public meetings and community endorsements apparent here, was perhaps more reflective of the limited numbers of people reached through these means, rather than these methods themselves. A Federal demonstration program known as Health Choice illustrated how effective such means can be. In this program, carried out in several communities nationally, HMOs were invited to participate in a series of joint presentations and a referral program that involves comparing the competing health plans in the market area. Portland, among the four communities studied, was the only site in which the Health Choice program was available. This program was used relatively extensively by persons when selecting an HMO: S/HMO members (6.0%), in contrast to HMO members (39.5%) had ever attended a meeting sponsored by Health Choice. Of those who did attend, the program was described by over half (48.9% and S/HMO members; 69% among HMO members) as being very influential in their decision to join a health plan. Only a few HMO members (5.4%) described the program as having no influence. This rate was higher among the S/HMO joiners (35.1%).

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